### **Dynamic Seashores**



This standards- based program targets 6- 8<sup>th</sup> grades. The physical and biological dynamics of the ocean beach at Fort Tilden are explored.

Students work in teams and visit the park twice to compare summer and winter aspects of the beach. They collect data in three discipline areas: beach profiling, sediment analysis, and floral and faunal inventories. In the classroom, students prepare reports and graphic displays of data and orally present their results.



#### **Operation Explore**

Operation Explore is a partnership of the Department of Education of the City of New York, New York State Parks, Recreation and Historic Parks, the New York State Department of Environmental Conservation, the New York City Department of Environmental Protection, Cornell Cooperative Extension, and the National Park Service at Gateway.

The program introduces city youngsters to the scientific concepts of adaptation and interdependence in nature; and the interrelationships between their home community and seashore, farm, and forest ecosystems. This yearlong program, for 4-6<sup>th</sup> grade students involves hours of classroom instruction, a ranger-guided day program at Gateway National Recreation Area, and a three - day residential camping program at Taconic Outdoor Education Center in Putnam County. Classes also visit a working farm at the Stony Kill Farm Environmental Education Center.

The Gateway site visit is an introduction to the coastal environment, and to the learning concepts that will be the basis of further instruction. Information learned about the coastal plants, animals, and environmental conditions found at Gateway are then used to compare those found in forest, farm, and home environments.

Please contact the NYC Department of Education at the Gateway Center for Science and Environmental Study, at (718) 252-7307 for further information about participation in this program.

National Park Service
U.S. Department of the Interior

Gateway National Recreation Area Jamaica Bay Unit



# Jamaica Bay Unit Education Programs



Camping program at Floyd Bennett Field's Ecology Village

## **Ecology Village Overnight Camping**

Students in Grades 4-12 explore the environment, sleep overnight in tents, prepare meals outdoors and practice cooperative living at one of Ecology Village's 4 campsites. Teachers have countless opportunities to enhance instruction in science, mathematics, communication arts and other areas.

There is a \$50.00 permit fee per group (35 student maximum). A 30- hour in- service teacher- training course, conducted by the United Federation of Teachers, is required prior to the trip. For returning teachers, a free 4- hour camping refresher course is required annually.

#### **Day Programs**

Following are the day program offerings at the Jamaica Bay Unit of Gateway National Recreation Area. Each day program is 2 hours in length and group size is limited to 35 students. There are no fees for the programs. A 2- 4 hour teacher workshop is required prior to class participation in any of these programs.

#### **Marine Explorations**

Students in grades 4<sup>th</sup> - 6<sup>th</sup> participate in a hands- on exploration of marine life.

This program is conducted at Dead Horse Bay, located across the street from Floyd Bennett Field. Students don chest waders, enter the shallows of the bay, and use seine and plankton nets to catch a myriad of marine life. The students examine their catch, use field guides to identify specimens, and document observations on weather, air temperature, wind speed, and tides.





#### What's Alive at Dead Horse Bay?

In this standards- based program, students in grades 4<sup>th</sup> - 6<sup>th</sup> examine, explore, and compare soil samples and plant adaptations in upland and shoreline habitats at Dead Horse Bay.

#### **Habitats by Land and Sea**

In this standards- based program, students in grades 4<sup>th</sup> - 6<sup>th</sup> grade work in small teams at the Jamaica Bay Wildlife Refuge to discover, explore, measure and compare environmental conditions, and plant and animal life in two different habitats.

\*\*Because of construction at the Jamaica Bay Wildlife Refuge, this program will not be offered after May 15, 2004, pending further notice.



National Park Service Rangers work closely with students to ensure safety, and a positive learning experience.

#### **Barrier Beach Habitat Hunt**

In this standards- based program, students in 4<sup>h</sup>- 6<sup>th</sup> grade work in small teams at Fort Tilden to collect and compare scientific data and observations on environmental conditions, plants and animals, of the maritime forest, back- dune, and ocean beach.

For information regarding programs, please call the Ecology Village Ranger Staff at (718) 338-4306.

Or write to us: Gateway NRA Jamaica Bay Unit Education Programs Ecology Village Floyd Bennett Field Brooklyn, NY 11234